West Virginia Department of Environmental Protection
Division of Air Quality

Joe Manchin, III
Governor

Stephanie R. Timmermeyer
Cabinet Secretary

Permit to Operate

Pursuant to
Title V
of the Clean Air Act

Issued to:
Sunoco, Inc. (R&M)
Neal Plant / Kenova
R30-09900010-2006

John A. Benedict
Director

Issued: January 3, 2006 • *Effective: January 17, 2006*
Expiration: January 3, 2011 • *Renewal: July 3, 2010*

Permit Number: **R30-09900010-2006**
Permittee: **Sunoco, Inc. (R&M)**
Facility Name: **Neal Plant**
Mailing Address: **200 Big Sandy Road, Kenova, WV 25530**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location: Kenova, Wayne County, West Virginia
Mailing Address:200 Big Sandy Road, Kenova, WV 25530
Telephone Number:(304) 453-1371
Type of Business Entity: Corporation
Facility Description: Polypropylene Polymers
SIC Codes:2821
UTM Coordinates: 360.6 km Easting • 4,246.1 km Northing • Zone 17

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Unit ID	Emis.Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
001		**Boilers**			
001-01 Boiler #2	02E	Boiler #2- Coal Fired Steam Boiler: Overfeed Stoker, Model# CE Vertical Type VU, Serial# 19621	1960	155 MM Btu/hr	Multicyclone, Baghouse
001-01 Baghouse	02E	Boiler #2 - Coal Fired Steam Boiler Baghouse			APCD
001-01 Multicyclone	02E	Boiler #2 - Coal Fired Steam Boiler: Multicyclone			APCD
Coal Storage Pile	fugitive	Coal Storage Piles	1960		NA
Coal Handling	fugitive	Coal Handling	1960		Water Mist
Coal Transfer	fugitive	Coal Transfer	1960		NA
001-02 Boiler #1	01E	Boiler #1 -Natural Gas Steam Boiler: Model# 1VP-10B, Serial# 6380	1961	77 MM Btu/hr	Low NOx Burners (Installed in 1995)
001-03 H-081	70E	H-081- Natural Gas Steam Boiler Nebraska Boiler, Model# NS-A-20, Serial# D-3226	1993	6.3 MM Btu/hr	NA
001-04 H-082	70E	H-082 -Natural Gas Steam Boiler Nebraska Boiler, Model# NS-A-20, Serial# D-3227	1993	6.3 MM Btu/hr	NA
002		**Material Preparation**			
B101	B101E	Nitrogen Heater	1960	3000 TPY Propane (1.7 MMBtu/hr)	NA

Emission Unit ID	Emis.Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
OSBL Flare	B542E	OSBL Flare; Model # STF-S-18C (Smokeless)	Const. - 10/6/60 Modif. - 5/1/88	40,000 lb/hr	(APCD) Air Pollution Control Device
D-1105A	B542E	Propylene Dryer	1995	81,000 lb/hr	OSBL Flare
D-1105B	B542E	Propylene Dryer	1995	81,000 lb/hr	OSBL Flare
Material Prep. Analyzer Bld. Speed Loops (EP27 &EP28)	B542E	Analyzer speed loops on old 27E and 28E sources	1988		Flare
J1401A	B542E	#1 Propylene RR Unloading Station	1985	70,000 lb/hr	OSBL Flare
J1401B	B542E	#2 Propylene RR Unloading Station	1985	70,000 lb/hr	OSBL Flare
J1401C	B542E	#3 Propylene RR Unloading Station	1985	70,000 lb/hr	OSBL Flare
J1401D	B542E	#4 Propylene RR Unloading Station	1995	70,000 lb/hr	OSBL Flare
Unpaved Roads	fugitive	Facility-wide unpaved roads	1960		NA
Paved Roads	fugitive	Facility-wide paved roads	1960		NA
Cooling Tower	fugitive	Facility cooling tower			NA
003		**Polymerization**			
DF-508	53E	Discharge Hopper Filter			APCD
D509	53E	Discharge Hopper	1988	250 lb/hr	DF-508 Filter
ISBL Flare	91E	ISBL Flare	1988	366,000 lb/hr	(APCD)
Poly Analyzer (EP29)	B542E	Analyzer Speed Loops on old 29E	1988		Flare
LDAR Components (A-10 and A-11)	Fugitive	Raw Material Prep Fugitive Emissions	1985	NA	NA

Emission Unit ID	Emis.Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
LDAR Components (A-91)	Fugitive	Poly Fugitive Emissions	1988	NA	NA
004		**Material Recovery**			
LDAR Components (A-RR)	Fugitive	Material Recovery Fug. Emissions			NA
005		**Product Finishing**			
D-8004	16E	D-8004 MasterBatch Receiver	1988	1,000 lb/hr	G-8004 Bag Filter (BF) G-8011C-Canister filter (CF)
G-8011C	16E	Receiver Units Canister Filter C			APCD
G-8004	16E	D-8004 Bag Filter			G-8011C- Canister Filter
G-8011A	19E	Receiver Units Canister Filter A			APCD
G-8005	19E	D-8005 Misc Additive Receiver - Bag Filter			G-8011A
G-8006	19E	D-8006 BHT Receiver - Bag Filter			G-8011A
G-8007	19E	D-8007 Misc Additive Receiver- Bag Filter			G-8011A
D-8005	19E	D8005 Misc Additive Receiver	1988	1885 lb/hr	G-8005 Bag filter
D-8006	19E	D-8006 BHT Receiver	1988	1885 lb/hr	G-8006 Bag Filter
D-8007	19E	D-8007 Misc Additive Receiver	1988	1885 lb/hr	G-8007 Bag Filter
G-8011B	20E	Receiver Units Canister Filter B			APCD
G-8005	20E	D-8005 Misc Additive Receiver - Bag Filter			G-8011B Canister Filter
G-8006	20E	B-8006 BHT Receiver Bag Filter			G-8011B Canister Filter

Emission Unit ID	Emis.Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
G-8007	20E	D-8007 Misc Additive Receiver- Bag Filter			G-8011B Canister Filter
D-8005	20E	D-8005 Misc Additive Receiver	1988	1885 lb/hr	G-8005 Bag Filter
D-8006	20E	D-8006 BHT Additive Receiver	1988	1885 lb/hr	G-8006 Bag Filter
D-8007	20E	D-8007 Misc Additive Receiver	1988	1885 lb/hr	G-8007 Bag Filter
G-8013	21E	Hard Resin Receiver Units Canister Filter			APCD
G-8009	21E	D-8009 Hard Resin Receiver - Bag Filter			G-8013 Canister Filter
D-8009	21E	D-8009 Hard Resin Receiver	1988	5,600 lb/hr	G-8009 Bag Filter G-8013 Canister Filter
G-8016	22E	WPA LIW Feeders Bag Filter			APCD
L-8004	22E	WPA L-8004 LIW Feeder #3	1988	32,000 lb/hr	G-8016 Bag Filter
L-8005	22E	WPA L-8005 LIW Feeder #7	1988	32,000 lb/hr	G-8016 Bag Filter
L-8006	22E	WPA L-8006 LIW Feeder #6	1988	32,000 lb/hr	G-8016 Bag Filter
L-8007	22E	WPA L-8007 LIW Feeder #4	1988	32,000 lb/hr	G-8016 Bag Filter
L-8009	22E	WPA L-8009 LIW Feeder #2	1988	32,000 lb/hr	G-8016 Bag Filter
J-8055	23E	WPA Pellet Dryer	1990	32,000 lb/hr	NA
G-8814	47E	WPB Classifier Undersized Pellets Bag Filter			APCD
L-8857	47E	WPB Pellet Classifier Undersized Pellets Line	1995	75,000 lb/hr	G-8814 Bag Filter
G-8816	52E	WPB Feeders, Blender/ Conveyor Bag Filter			APCD

Emission Unit ID	Emis.Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
L-8903	52E	L-8903 Feeder #2	1994	75,000 lb/hr	G-8816 Bag Filter
L-8904	52E	L-8904 Feeder #3	1994	75,000 lb/hr	G-8816 Bag Filter
L-8905	52E	L-8905 Feeder #5	1994	75,000 lb/hr	G-8816 Bag Filter
L-8906	52E	L-8906 Feeder #6	1994	75,000 lb/hr	G-8816 Bag Filter
L-8907	52E	L-8907 Feeder #7	1994	75,000 lb/hr	G-8816 Bag Filter
L-8908	52E	L-8908 Feeder #4	1994	75,000 lb/hr	G-8816 Bag Filter
L-8829	52E	L-8829 Blender/Conveyor	1994	75,000 lb/hr	G-8816 Bag Filter
L-8008	55E	WPA LIW Feeder #1	1988	32,000 lb/hr	G-8008 Bag Filter
G-8008	55E	WPA LIW Feeder #1 Bag Filter			APCD
L-8856	56E	L-8856 WPB Pellet Dryer	1994	75,000 lb/hr	NA
G-738	58E	WPB South Dust Collector			APCD
~~Malcon~~Matcon-Buls Loading Booth	58E	Matcon-Buls Loading Booth (2nd Floor)	1988	1500 lb/hr	~~G-739~~ G-738 Dust Collector
Drum Weigh Station	58E	Drum Weigh Station (3rd Floor)	1988	1500 lb/hr	~~G-739~~ G-738 Dust Collector
D-8808	58E	D-8808 Feeder to R1 New Line B Ribbon Blender (3rd Floor)	1988	1500 lb/hr	~~G-739~~ G-738 Dust Collector
D-8809	58E	D-8809 Feeder to R1 New Line B Ribbon Blender (3rd Floor)	1988	1500 lb/hr	~~G-739~~ G-738 Dust Collector
D-8829	58E	D-8829Feeder to R1 New Line B Ribbon Blender (3rd Floor)	1988	1500 lb/hr	~~G-739~~ G-738 Dust Collector
~~Malcon~~Matcon-Buls Unloading Booth	58E	Matcon-Buls Unloading Booth (3rd Floor)	1988	1500 lb/hr	~~G-739~~ G-738 Dust Collector

Emission Unit ID	Emis.Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Unnamed Cyclone #1.	64E	Portable Blower Unit #1 - Unnamed Cyclone #1			APCD
Portable Blower Unit #1	64E	Portable Blower Unit #1	1980	8,000 lb/hr	Unnamed cyclone #1
Unnamed Cyclone #2.	71E	Portable Blower Unit #2 - Unnamed Cyclone #2			APCD
Portable Blower Unit #2	71E	Portable Blower Unit #2	1980	8,000 lb/hr	Unnamed cyclone #2
Unnamed After Filter	65E	WP1 & WP2 Feed Transport System After Filter			APCD
G-800	65E	WP1& WP2 Feed Transport System Dust Collector			Unnamed After Filter
G-494	65E	G-494 WP1 Cyclone	1980	1,000 lb/hr	G-800 Dust Collector Unnamed After Filter
G-495	65E	G-495 WP2 Cyclone	1980	1,000 lb/hr	G-800 Dust Collector Unnamed After Filter
L-816B	68E	WP2 Extruder	1980	1000 lb/hr	NA
WP2 Pellet Loading Hopper	69E	WP2 Pellet Loading Hopper	1980	1000 lb/hr	NA
006		**Product Storage**			
G-9001	24E	G-9001 Silos Bag Filter			APCD
D-9003	24E	Pellet Silo	1990	75,000 lb/hr	G-9001 Bag Filter
D-9002	24E	Pellet Silo	1990	75,000 lb/hr	G-9001 Bag Filter
G-9002	26E	G-9002 Silo/Blender Bag Filter			APCD
D-9001	26E	Pellet Silo	1990	75,000 lb/hr	G-9002 Bag Filter
D-9004	26E	Pellet Silo	1990	75,000 lb/hr	G-9002 Bag Filter
G-9004	38E	G-9004 Blenders Bag Filter			APCD

Emission Unit ID	Emis.Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
D-9006	38E	Pellet Silo	1994	75,000 lb/hr	G-9004 Bag Filter
D-9011	38E	Pellet Silo	1994	75,000 lb/hr	G-9004 Bag Filter
G-9501	42E	Flotriator Bag Filter			APCD
L-9501	42E	Flotriator	1984	60,000 lb/hr	G-9501 Bag Filter
G-9005	49E	G-9005 Blenders Bag Filter			APCD
D-9007	49E	Pellet Silo	1994	75,000 lb/hr	G-9005 Bag Filter
D-9010	49E	Pellet Silo	1994	75,000 lb/hr	G-9005 Bag Filter
G-9006	50E	G-9006 Blenders Bag Filter			APCD
D-9008	50E	Pellet Silo	1994	75,000 lb/hr	G-9006 Bag Filter
D-9009	50E	Pellet Silo	1994	75,000 lb/hr	G-9006 Bag Filter
G-9503	51E	Pelletron Bag Filter			APCD
L-9503	51E	Pelletron	1994	60,000 lb/hr	G-9503 Bag Filter
G-0908	59E	Returned Rail Car Unloading Cyclone Cartridge Filter			APCD
G-0911	59E	Returned Rail Car Unloading Cyclone Bag Filter			G-0908 - Cartridge
G-0904	59E	Returned Rail Car Unloading Cyclone	1980	5,479 lb/hr	G-0911 Bag Filter G-0908 - Cartridge Filter
D-670 (SB-1)	60E	Super Blender	1978	5,479 lb/hr	NA
D-672 (SB-2)	61E	Super Blender	1981	5,479 lb/hr	NA
SB-3	62E	Truck Loading Pellet Silo	1979	33,000 lb/hr	NA
~~D-499~~ D-449	63E	Packing Silo	1966	6,000 lb/hr	NA
G-9003	72E	G-9003 Blenders Bag Filter			APCD

Emission Unit ID	Emis.Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
D-9005	72E	Pellet Silos	1994	75000	G-9003 Baghouse
D-9012	72E	Pellet Silos	1994	75000	G-9003 Baghouse

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-1830F	April 1, 2008

2.0. General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr	Pounds per Hour
LDAR	Leak Detection and Repair
M	Thousand
MACT	Maximum Achievable Control Technology
MM	Million
MMBtu/hr *or* mmbtu/hr	Million British Thermal Units per Hour
MMCF/hr *or* mmcf/hr	Million Cubic Feet Burned per Hour
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10µm in diameter
pph	Pounds per Hour
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds

2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c. **[45CSR§30-5.1.b.]**

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3..
[45CSR§30-6.3.b.]

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.
[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.
[45CSR§30-5.8.a.]

2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution Control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met. **[45CSR§30-5.7.b.]**

2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.
[45CSR§30-5.1.a.2.]

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** Prior to the commencement of a demolition and/or renovation activity, the permittee shall cause the affected part of the facility to be thoroughly inspected for the presence of asbestos-containing materials, include Category I and Category II nonfriable asbestos-containing material (ACM). If ACMs are found to be present and are subject to regulation under 40 CFR 61, Subpart M, the permittee shall comply with all applicable requirements of 40 CFR 61, Subpart M, including the filing of the Notification of Abatement, Demolition or Renovation and the observance of the mandatory 10 working day waiting period.
[40 CFR §61.145(a)]

Demolition operations, irrespective of the presence or absence of ACMs, are also subject to the Notification requirements of 40 CFR §61.145(b)(1), (2), (3)(i) and (iv), and (4)(i) through (vii) and (4)(ix) and (xvi). Please be aware that section 3(i) as referenced above requires the notification to be submitted 10 working days before demolition begins.
[40 CFR §61.145(a)(2)]

*Note:
The asbestos inspection must be conducted by an individual holding an asbestos inspector's license, valid at the time of the inspection, issued by the WV Bureau of Public Health under 64 CSR 63. The Asbestos Abatement Licensing Rule does not make any distinction between friable and non-friable ACMs. All ACMs must be removed prior to any activity commencing, which will potentially disturb them
[64 CSR 63]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public. This requirement streamlines compliance with the incinerator requirements pertaining to odors of 45CSR§6-4.6.
[45CSR§4-3.1 State-Enforceable only.]

3.1.5. [Reserved]

3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]

3.1.7. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]

3.1.8. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

3.1.9. Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.
[40 C.F.R. 68]

3.1.10. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13, Permit No. R13-1830~~E~~ condition 4.1.20.]

3.2. Monitoring Requirements

3.2.1. None

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

[WV Code § 22-5-4(a)(15) and 45CSR13, Permit No. R13-1830~~E~~, Condition 4.3.1., 4.3.5., 4.3.6]

3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.]
[45CSR13, Permit No. R13-1830~~E~~, Condition 4.4.1.]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received. Such record shall contain an assessment of the validity of the complaints as well as any corrective actions taken.
[45CSR§30-5.1.c. State-Enforceable only.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§30-4.4. *and* 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]

3.5.3. All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class, or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Enforcement and Permits Review
(3AP12)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.
[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.
[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary. **[45CSR§30-5.1.c.3.B.]**

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan - Not applicable

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

a. Sunoco's Neal facility was found not to be subject to 40CFR60 Subpart Db pertaining to the 155 MM Btu/hr coal fired boiler, which was constructed in 1960 before the 1984 applicability date.

b. In addition a non-applicability determination with respect to 40CFR60 Subpart Dc was also made pertaining to Boiler #1, a 77 MM Btu/hr natural gas fired boiler constructed in 1961 before the 1989 applicability date. In 1995, a low NOx burner was added to Boiler #1; however, the addition is not considered a modification under 40CFR60, Subpart A since it did not result in an increase of air pollutants to which 40CFR60, Subpart Dc applies.

c. A non-applicability determination with respect to 40CFR60, Subpart Dc was also made for the H-081 and H-082 boilers since their rated capacity is less than the applicability threshold of 10 MM Btu/hr.

4.0. Source-Specific Requirements for Boiler #1, #2, H-081, and H-082 pertaining to Emission Points 01E, 02E,and 70E.

4.1. Limitations and Standards

4.1.1. No person shall cause, suffer, allow or permit emission of smoke and or particulate matter into the open air from any fuel burning unit which is darker in shade or appearance than ten (10) percent opacity.
[45CSR13, Permit No. R13-1830~~E~~ condition 4.1.14., 45CSR§2-3.1., Emission Point ID (01E, 02E, 70E)]

4.1.2. Pursuant to 45CSR2, Section 4, the emission of particulate matter into the open air from Boiler #2 shall not exceed 22 lb/hr.
[45CSR13, Permit No. R13-1830~~E~~ condition 4.1.14., 45CSR§2-4.1.c., Emission Point ID (02E)]

4.1.3. Pursuant to 45CSR2, Section 4, the emission of particulate matter into the open air from Boiler #1 shall not exceed 6.93 lb/hr.
[45CSR13, Permit No. R13-1830~~E~~ condition 4.1.14., 45CSR§2-4.1.b., Emission Point ID (01E)]

4.1.4. Emissions of SO2 from Boiler #2 shall not exceed 282 lb/hr and 1,235.16 ton/yr. Compliance with this limit as originally defined by the construction and modification permit streamlines compliance with the SO2 emission limit from SIP approved 45CSR10.
[45CSR13, Permit No. R13-1830~~E~~ condition 4.1.1. and 4.1.17., Emission Point ID (02E)]

4.1.5. The facility shall operate a coal-fired boiler unit, identified as boiler #2, with a maximum heat input of 155 MMBtu per hour.
[45CSR13, Permit No. R13-1830~~E~~ condition 4.1.8., Equipment ID (Boiler #2)]

4.1.6. Pursuant to 45CSR10, Section 3, the emissions of SO2 from Boiler #1 shall not exceed 246.4 lb/hr.
[45CSR13, Permit No. R13-1830~~E~~ condition 4.1.17., 45CSR§10-3.3.f., Emission Point ID (01E)]

4.1.7. The two boilers, identified as H081 and H082, shall fire only natural gas and shall be operated in such a manner as to not exceed, for each boiler, a steam production capacity of 5,000 pounds per hour or a maximum design heat input of 6.3 MMBtu per hour.
[45CSR13, Permit No. R13-1830~~E~~ condition 4.1.6., Equipment ID (H-081 and H-082)]

4.1.8. The two boilers, identified as H081 and H082, shall, for each boiler, combust no more than 46.8×10^6 ft^3 of natural gas per year on a rolling continuous twelve month basis.
[45CSR13, Permit No. R13-1830~~E~~ condition 4.1.7., Equipment ID (H-081 and H-082)]

4.1.9. Emissions to the atmosphere from the combined stack of Boilers H-081 and H-082 shall not exceed the following:

Emission Point	Pollutant	Emission Limits	
		pph	tpy
70E	PM_{10}	0.09	0.36
	SO_2	0.01	0.02
	NO_x	1.24	4.68
	CO	1.04	3.94
	VOC	0.14	0.26

[45CSR13, Permit No. R13-1830~~E~~ condition 4.1.1, Emission Point ID (70E)]

4.1.10 No person shall cause, suffer, allow or permit any source of fugitive particulate matter to operate that is not equipped with a fugitive particulate matter control system. This system shall be operated and maintained in such a manner as to minimize the emission of fugitive particulate matter. Sources of fugitive particulate matter associated with fuel burning units shall include, but not be limited to, the following:

a. Stockpiling of ash or fuel either in the open or in enclosures such as silos;

b. Transport of ash in vehicles or on conveying systems, to include spillage, tracking or blowing of particulate matter from or by such vehicles or equipment; and

c. Ash or fuel handling systems and ash disposal areas.

[45CSR13, Permit No. R13-1830~~E~~ condition 4.1.14., 45CSR§2-5.1., Equipment ID (Boiler #2)]

4.1.11. Reserved. ~~Boilers #1, 2, H-081, and H-082 shall comply with all applicable requirements of 40 CFR 63, Subpart DDDDD - "National Emissions Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters" no later than September 13, 2007. Upon submitting the notification of compliance status report to EPA region III and the WV DAQ the permittee shall also submit a complete application for a significant Title V permit modification to incorporate the specific requirements and parameters established in accordance with of 40 C.F.R. 63, Subpart DDDDD.~~
~~[45CSR34, 40 C.F.R. §63.7495(b) and 63.7545(b), Emission Point ID (02E, 01E, and 70E)]~~

4.1.12. The permittee shall demonstrate that any future proposed changes to SO2 emission rates or emission parameters at the facility will not cause or contribute to any violation of the SO2 NAAQS.
[45CSR13, Permit No. R13-1830~~E~~ condition 4.1.9.]

4.1.13 The visible emission standards of 45CSR§2-3 and thus 4.1.1 shall apply at all times except during periods of start-up, shutdown, or malfunctions. Section 45CSR§2-9.2 specifies that during these times the permittee shall maintain and operate any fuel burning unit(s) including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.
[45CSR§§2-9.1 & 9.2, Emission Point IDS (01E, 02E)]

4.2. Monitoring Requirements

4.2.1. For the purpose of determining compliance with the permit limits based on the maximum heat input associated with the coal-fired boiler unit as described in 4.1.5. of this permit, the permittee shall receive a fuel analysis for each shipment of coal received at the facility to determine the weight percent of sulfur content and the average fuel heating value (FHV) per pound of coal. If a fuel analysis is not received from the vendor upon delivery of the coal, the permittee shall be responsible for conducting a fuel analysis prior to the coal being introduced into the boiler. The heat input rate shall be calculated by multiplying the FHV of coal by the maximum hourly fuel consumption rate of the boiler. This information shall be maintained on-site for a period of no less than five (5) years and made available to the Director or his/her duly authorized representative upon request. At a time prior to being submitted to the Director, all records shall be certified and signed by a "Responsible Official" utilizing the attached Certification of Data Accuracy Statement labeled as Attachment A.
[45CSR13, Permit No. R13-1830~~E~~, condition 4.4.5., Equipment ID (Boiler #2)]

4.2.2. Boiler #1 shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit in a manner consistent with 45CSR§2A-7.1.a.1., which is defined as follows:
For fuel burning unit(s) which burn only pipeline quality natural gas, such records shall include, but not be limited to, the date and time of start-up and shutdown as well as the quantity of fuel consumed on a monthly basis.
[45CSR§2A-7.1.a.1., 45CSR§2-8.3.c., Equipment ID (Boiler #1)]

4.2.3. Compliance with the opacity, particulate matter and sulfur dioxide limits defined by 4.1.1., 4.1.2., and 4.1.4. of this permit shall be demonstrated in accordance with the sources approved Regulation 2 & 10 monitoring plan for the #2 Boiler. This plan specifies that the sulfur and heat content of coal be sampled once per shipment, as well as establishes a daily operating log and baghouse pressure drop monitoring and recordkeeping

requirements as approved in the facility's 45CSR2/45CSR10 Monitoring Plan, submitted by the permittee on ~~January 11, 2005~~ April 7, 2008. This monitoring requirement shall also incorporate any updates or amendments thereto approved by the WV DAQ provided the changes meet the criteria specified within section 2.11 "Operational Flexibility" and the permittee abides by the notification requirements described therein. The current plan was approved by WV DAQ ~~July 26, 2005~~ April 7, 2008 and is attached as Attachment B to this permit. Compliance with the monitoring, recordkeeping, and testing requirements specified within the monitoring plan referenced above streamlines and assures compliance with requirements 4.2.1 and 4.3.3 of this permit.
[45CSR13, Permit No. R13-1830~~E~~, Condition 4.1.18.,
45CSR2/45CSR10 Monitoring Plan, Equipment ID (Boiler #2)]

4.2.4. Records of all required monitoring data and support information shall be maintained on-site for a period of at least five (5) years from the date of monitoring, sampling, measurement or reporting. Support information includes all calibration and maintenance records and all strip chart recordings for continuous monitoring instrumentation, and copies of all required reports.
[45CSR§2A-7.1.b., Equipment ID (Boiler #1 and Boiler #2)]

4.3 Testing Requirements

4.3.1. At such reasonable times as the Director may designate, the owner or operator of any fuel burning unit(s), manufacturing process source(s) or combustion source(s) may be required to conduct or have conducted tests to determine the compliance of such source(s) with the SO_2 emission limitations of 45CSR10 sections 3 and thus 4.1.4 of this permit. Such tests shall be conducted in accordance with the appropriate test method set forth in 40 CFR Part 60, Appendix A, Method 6, Method 15 or other equivalent EPA testing method approved by the Director. The Director, or his or her duly authorized representative, may at his or her option witness or conduct such tests. Should the Director exercise his or her option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.
[45CSR§10-8.1., Emission Point ID (02E)]

4.3.2. At such reasonable times as the Director may designate, the owner or operator of any fuel burning unit(s) may be required to conduct or have conducted test to determine the compliance of such unit(s) with the PM emission limitations of 45CSR2 section 4 and thus requirements 4.1.2 and 4.1.3. of this permit. Such tests shall be conducted in accordance with the appropriate method set forth in the Appendix to this rule or other equivalent EPA approved method approved by the Director. The Director, or his duly authorized representative, may at his option witness or conduct such tests. Should the Director exercise his option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports located in such a manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices.
[45CSR§2-8.1.b., Emission Point ID (01E, 02E)]

4.3.3. Visible emission testing shall be conducted for the #2 Boiler on a monthly basis in accordance with the approved 45CSR2 Monitoring Plan, approved by WV DAQ ~~July 26, 2005~~ April 7, 2008.
[45CSR2 Monitoring Plan, 45CSR§2A-5.1.a.,Equipment ID (Boiler #2)]

4.3.4. Particulate matter stack testing shall be performed on the #2 Boiler in accordance with 45CSR§2A-5.2.. The test results recorded in Sunoco's September 9, 2005 report results in a "Cycle 3" testing frequency. 45CSR2 defines "Cycle3" to mean that testing shall be performed within thirty-six (36) months from the date of the previous test, but no earlier than eighteen (18) months from the date of the previous test.
[45CSR§2A-5.2.,Equipment ID (Boiler #2)]

4.4. Recordkeeping Requirements

4.4.1. For the purpose of determining compliance with limitations 4.1.7., 4.1.8., and 4.1.9. the permittee shall maintain records of the amount of natural gas consumed on a monthly basis as well as a rolling 12 month total in (scf/yr). In addition to natural gas usage the permittee shall also maintain records of the monthly NOx emissions based on the amount of fuel consumed divided by the hours operated per the given month. The resulting quotient in (scf/hr) should then be multiplied by the appropriate AP-42 emission factors for small boilers (100 lb NOx /MMscf).

[45CSR13, Permit No. R13-1830~~E~~, Condition 4.4.4., Equipment ID (H081, H082)]

4.4.2. The recordkeeping and reporting requirements for Boiler #2 are established within the monitoring section of this permit under 4.2.3.

[45CSR13, Permit No. R13-1830~~E~~, Condition 4.1.18., 45CSR2/45CSR10 Monitoring Plan, Equipment ID (Boiler #2)]

4.5. Reporting Requirements

4.5.1. The permittee shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity (i.e. emission exceeding the standards defined in 4.1.1., 4.1.2. and 4.1.3. of this permit) as provided in one of the following subdivisions:

a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:

a.1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and

a.2. Excess opacity does not exceed 40%.

b. The owner or operator shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in subdivision 4.5.1.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:

b.1. A detailed explanation of the factors involved or causes of the malfunction;

b.2. The date and time of duration (with starting and ending times) of the period of excess emissions;

b.3. An estimate of the mass of excess emissions discharged during the malfunction period;

b.4. The maximum opacity measured or observed during the malfunction;

b.5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and

b.6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3, Emission Point IDS (01E, 02E)]

4.5.2. In the event of an unavoidable shortage of fuel having characteristics or specifications necessary for a fuel burning unit to comply with the visible emission standards set forth in 45CSR §2-3 and thus 4.1.1. of this permit or any emergency situation or condition creating a threat to public safety or welfare, the Director may grant an exception to the otherwise applicable visible emission standards for a period not to exceed fifteen (15)

days, provided that visible emissions during the exception period do not exceed a maximum six (6) minute average of thirty (30) percent and that a reasonable demonstration is made by the owner or operator that the emission standards under 45CSR§2-4 and thus 4.1.2. and 4.1.3. of this permit will not be exceeded during the exemption period. **[45CSR§2-10.1, Emission Point IDS. (01E, 02E, and 70E)]**

4.5.3. Due to unavoidable malfunction of equipment or inadvertent fuel shortages, emissions exceeding those provided for in 4.1.4. and 4.1.6. may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the equipment malfunction or fuel shortage. In cases of major equipment failure or extended shortages of conforming fuels, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.

[45CSR§10-9.1., Emission Point IDS. (01E, 02E)]

5.0. Source-Specific Requirements for Particulate Matter Sources corresponding to Emission PointsID(s): (19E, 20E, 21E, 22E, 23E, 24E, 26E, 38E, 42E, 47E, 49E, 50E, 51E, 52E, 53E, 55E, 56E, 58E, 59E,60E,61E,62E, 63E, 64E, 65E, 68E, 69E, 71E and 72E)]

5.1. Limitations and Standards

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7 of 45CSR7.

[45CSR13, Permit No. R13-1830~~E~~, Condition 4.1.16., 45CSR§7-3.1.]

5.1.2. Maximum allowable hourly and annual emissions from the following emission points shall not exceed the limitations set forth in the table below.

Emission Points	Pollutant	Emission Limits	
		pph	tpy
16E	PM_{10}	0.03	0.13
19E	PM_{10}	0.01	0.04
20E	PM_{10}	0.01	0.04
21E	PM_{10}	0.01	0.04
22E	PM_{10}	0.03	0.13
23E	PM_{10}	0.08	0.35
24E	PM_{10}	0.02	0.09
26E	PM_{10}	0.02	0.09
38E	PM_{10}	0.02	0.09
42E	PM_{10}	0.02	0.09
47E	PM_{10}	0.02	0.09
49E	PM_{10}	0.02	0.09
50E	PM_{10}	0.02	0.09
51E	PM_{10}	3.14	13.75
52E	PM_{10}	0.02	0.09
53E	PM_{10}	0.02	0.09
55E	PM_{10}	0.28	1.23
56E	PM_{10}	5.00	21.90
58E	PM_{10}	0.18	0.79
59E	PM_{10}	0.55	2.40

Emission Points	Pollutant	Emission Limits	
		pph	tpy
60E	PM_{10}	0.55	2.40
61E	PM_{10}	0.55	2.40
62E	PM_{10}	2.38	10.42
63E	PM_{10}	0.60	2.63
64E	PM_{10}	0.80	3.50
65E	PM_{10}	0.12	0.53
68E	PM_{10}	0.12	0.53
69E	PM_{10}	0.12	0.53
71E	PM_{10}	0.80	3.50
72E	PM_{10}	0.02	0.09

Compliance with the PM emission limits established above streamlines compliance with 45CSR§7-4.1.

[45CSR13, Permit No. R13-1830E, Condition 4.1.1.]

5.2. Monitoring Requirements

5.2.1. *Opacity Monitoring and Visual Emission Check Procedures.* For the purpose of determining compliance with the opacity limits set forth in 5.1.1., the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for all emission sources subject to an opacity limit.

The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40CFR Part 60, Appendix A, Method 22 or from the lecture portion of the 40CFR Part 60, Appendix A, Method 9 certification course.

Visible emission checks shall be conducted at least once per calendar month with a maximum of forty-five (45) days between consecutive readings. These checks shall be performed at each source (stack, transfer point, fugitive emission source, etc.) for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Visible emission checks shall be performed during periods of normal facility operation and appropriate weather conditions.

If visible emissions are present at a source(s) for three (3) consecutive monthly checks, the permittee shall conduct an opacity reading at that source(s) using the procedures and requirements of 45CSR§7A as soon as practicable, but within seventy-two (72) hours of the final visual emission check for the calendar quarter. A 45CSR§7A observation at a source(s) restarts the count of the number of consecutive readings with the presence of visible emissions.

[45CSR13, Permit No. R13-1830E, Condition 4.2.1.]

5.3. Testing Requirements

5.3.1. Opacity testing. Any test to determine compliance with the visible emission (opacity) limitations set forth in Sections 5.1.1 per the requirements of Section 5.2.1, shall be conducted by personnel appropriately trained for the task. Personnel performing the visual emissions observation shall be trained and familiar with the limitations and restrictions associated with 40CFR Part 60, Appendix A - Method 22. Any person performing an opacity observation for compliance assessment in the event of visible emissions must be a certified visible emission observer in accordance with 45CSR7A - "Compliance Test Procedures for 45CSR7 - To Prevent and Control Particulate Air Pollution from Manufacturing Process Operations" and Method 22 of 40CFR60 Appendix A. Nothing in this section, however, shall preclude any permittee or the Secretary from using opacity data from a properly installed, calibrated, maintained and operated continuous opacity monitor as evidence to demonstrate compliance or a violation of visible emission requirements. If continuous opacity monitoring data results are submitted when determining compliance with visible emission limitations for a period of time during which 45CSR7A or Method 22 data indicates noncompliance, the 45CSR7A or Method 22 data shall be used to determine compliance with the visible emission limitations.

[45CSR13, Permit No. R13-1830~~E~~, Condition 4.3.4.]

5.3.2. Any stack serving any process source operation or air pollution control device on any process source operation shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.

[45CSR13, Permit No. R13-1830~~E~~, Condition 4.3.3.]

5.4. Recordkeeping Requirements

5.4.1. *Record of Maintenance of Air Pollution Control Equipment.* For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13, Permit No. R13-1830~~E~~, Condition 4.4.2.]

5.4.2. *Record of Malfunctions of Air Pollution Control Equipment.* For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction

[45CSR13, Permit No. R13-1830~~E~~, Condition 4.4.3.]

5.4.3. Compliance with the maintenance of air pollution control equipment requirements of Section 3.1.10 coupled with the air pollution control equipment maintenance and malfunction record keeping requirements of 5.4.1 and 5.4.2 shall constitute compliance with the PM_{10} emission limits established by 5.1.2. of this Title V permit. **[45CSR13, Permit No. R13-1830~~E~~, Condition 4.1.4.]**

5.4.4. The permittee shall maintain records of all monitoring data required by Section 5.2.1 documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the responsible observer, the results of the check, whether the visible emissions are normal for the process, and, if necessary, all corrective actions taken. The permittee shall also record the general weather conditions during the observations. Should a visible emission observation be required to be performed per the requirements specified in 45CSR§7A, the data records of each observation shall be maintained per the requirements of 45CSR§7A. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13, Permit No. R13-1830~~E~~, Condition 4.4.6.]

5.5. Reporting Requirements

5.5.1. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in 45CSR7 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.

[45CSR§7-9.1.]

5.5.2. Any violation(s) of the allowable visible emission requirement for any emission source discovered during testing using 45CSR§7A must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

[45CSR13, Permit No. R13-1830~~E~~, Condition 4.5.3.]

6.0. Source-Specific 45CSR21 and 40CFR60 Requirements for Volatile Organic Compound (VOC) Sources corresponding to the Manufacturing of Polypropylene: Equipment-Area IDS or Emission Points: (91E, B542E, 68E, WPB Extruder, WPA Extruder, EP27, EP28, EP29, R201, R202, and Fugitive Emission Areas A-RR, A-10, A-11, A-91, and A-8)

6.1. Limitations and Standards

6.1.1. The permitted facility shall comply with all applicable requirements of 40 CFR 60 subpart DDD - "Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry," provided that compliance is maintained with any more stringent limitations set forth in this permit.

[Compliance with this condition streamlines and assures compliance with 45CSR§§21-37 and -38.]

[45CSR13 Permit No. R13-1830~~E~~ condition 4.1.11, 45CSR§21-37, 45CSR§21-38, 45CSR16, 40CFR60 Subpart DDD, Emission Point ID(s) (91E, B542E)]

6.1.2 Sunoco's polypropylene production unit shall control all continuous VOC emissions from the affected facility as defined by 40CFR§60.560(a)(1) in accordance with process emission standard 40CFR§60.562-1(a)(1)(i)(C). This standard requires these vent streams be combusted in a flare that meets the conditions specified in 40CFR§60.18. The opacity requirements within 40CFR§60.18. streamlines compliance with the incinerator requirements of 45CSR§6-4.3.

[45CSR13 Permit No. R13-1830~~E~~ condition 4.1.11., 40CFR§60.562-1(a)(1)(i)(C), 45CSR§6-4.3, Emission Point ID(s) (91E, B542E)]

6.1.3. Sunoco's polypropylene production unit shall control all intermittent VOC emissions from the affected facility as defined in 40CFR§60.560(a)(1) by meeting the control requirements specified by 40CFR§60.562-1(a)(2)(i). This section specifies the permittee shall combust the emissions in a flare that is:

A) Designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours,

B) Operated with a flame present at all times, and

C) Designed to maintain a stable flame.

The opacity requirements specified within 6.1.3.A above streamlines compliance with the 20% opacity incinerator requirements of 45CSR§6-4.3.

[45CSR13 Permit No. R13-1830~~E~~ conditions 4.1.11., 40CFR§60.562-1(a)(2)(i), 45CSR§6-4.3, Emission Point ID(s) (91E, B542E)]

6.1.4. Sunoco's Neal Plant being subject to the provisions of 40CFR60 Subpart DDD shall comply with the standards for VOC equipment leaks per 40CFR§60.562-2. This includes but is not limited to the requirements specified by 40CFR§60.482-1 through §60.482-10 pertaining to 40CFR60 Subpart VV.

[45CSR13 Permit No. R13-1830~~E~~ conditions 4.1.10., 45CSR§21-37., 45CSR16, 40CFR§60.562-2, Process Areas (A-RR, A-10, A-11, A-91, A-8)]

6.1.5. The feed of Volatile Organic Compounds to the OSBL Flare for Area 11 shall not exceed ~~500,000~~ 2,500,000 pounds per year on a rolling continuous twelve (12) month basis. Compliance with the annual feed rate to the OSBL Flare constitutes compliance with the emission limits established within 6.1.9., for emission point B542E.

[45CSR13, Permit No. R13-1830~~E~~, Condition 4.1.2., Emission Point ID (B542E)]

6.1.6. The feed of Volatile Organic Compounds to the ISBL Flare for Area 90 shall not exceed ~~500,000~~ 2,500,000 pounds per year on a rolling continuous twelve (12) month basis. Compliance with the annual feed rate to the ISBL Flare constitutes compliance with the emission limits established within 6.1.9., for emission point 91E.

[45CSR13, Permit No. R13-1830~~E~~, Condition 4.1.3., Emission Point ID (91E)]

6.1.7. The hourly production, as measured at the polymerization loop reactors (R201 and R202), of Polypropylene Resin shall not exceed 75,000 pounds. The annual production of Polypropylene Resin shall not exceed 325,000 tons on a rolling continuous twelve (12) month basis.

[45CSR13, Permit No. R13-1830~~E~~ Condition 4.1.5., Equipment ID(s) (R201, R202)]

6.1.8. The speed loops associated with the de minimus (per 45CSR§13-2.6) in-line process stream analyzer units (EP27, EP28, and EP29) shall at all times be vented to the flare header system. Within 180 days of permit issuance the permittee shall submit a notice of compliance report to WV DAQ certifying that all appropriate piping has been completed and the in line analyzers are in full compliance with this requirement.

[45CSR13, Permit No. R13-1830~~E~~ Condition 4.1.19., Equipment ID(s) (EP27, EP28, EP29)]

6.1.9. Maximum allowable hourly and annual emissions from the following emission points shall not exceed the limitations set forth in the table below.

Emission Points	Pollutant	Emission Limits	
		pph	tpy
91E	VOC	~~1.19~~ 6.68	~~0.74~~ 3.69
	CO	~~3.21~~ 17.65	~~2.00~~ 9.78
	NOx	~~0.79~~ 3.27	~~0.49~~ 1.91
	PM_{10}	~~3.14~~ 1.81	~~1.96~~ 1.01
B542E	VOC	~~1.19~~ 22.48	~~0.74~~ 3.69
	CO	~~3.20~~ 59.41	~~1.99~~ 9.78
	NOx	~~0.75~~ 10.94	~~0.47~~ 1.91
	PM_{10}	~~3.14~~ 6.10	~~1.96~~ 1.01

Compliance with the PM portion of this requirement streamlines compliance with 45CSR§6-4.1.

[45CSR13, Permit No. R13-1830~~E~~, Condition 4.1.1., 45CSR§6-4.1]

6.2 Monitoring Requirements

6.2.1 The permittee shall comply with the Monitoring Requirements of 40CFR§60.563. The sections applicable to Sunoco's Neal Plant include the following:

§60.563(a) Whenever a particular item of monitoring equipment is specified in this section to be installed, the owner or operator shall install, calibrate, maintain, and operate according to manufacturer's specifications that item as follows:

A flame monitoring device, such as a thermocouple, an ultraviolet sensor, an infrared beam sensor, or similar device to indicate and record continuously whether a flare or pilot light flame is present, as specified.

§60.563(b)(2) - If a flare is used:

(i) A flame monitoring device shall be installed to indicate the presence of a flare flame or a flame for each pilot light, if the flare is used to comply with §60.562-1(a)(1)., including those flares controlling both continuous and intermittent emissions.

§60.563.c. - Owners or operators of control devices used to comply with the provisions of this subpart, except §60.562-1(a)(1)(i)(D), shall monitor theses control devices to ensure that they are operated and maintained in conformance with their designs.

[**45CSR16, 40CFR§60.563., Emission Point ID(s) (91E, B542E)**]

6.3 Testing Requirements

6.3.1 The permittee shall comply with the Testing Requirements of 40CFR§60.564. The sections applicable to Sunoco's Neal Plant include the following:

§60.564.a In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures specified in this section, except as provided under §60.8(b). Owners or operators complying with §60.562-1(a)(1)(i)(D) need not perform a performance test on the control device, provided the control device is not used to comply with any other requirements of §60.562-1(a).

§60.564(a)(1)Whenever changes are made in production capacity, feedstock type or catalyst type, or whenever there is a replacement, removal, or addition of a control device, each owner or operator shall conduct a performance test according to the procedures in this section as appropriate, in order to determine compliance with §60.562-1.

§60.564(e) The owner or operator shall determine compliance of flares with the visible emission and flare provisions in §60.562-1 as follows:

(e)(1)- Method 22 shall be used to determine visible emissions. The observation period for each run shall be 2 hours.

(e)(2)- The monitoring device of §60.563(b)(2) shall be used to determine whether a flame is present.

§60.564(f) The owner or operator shall determine compliance with the net heating value provisions in §60.18 as referenced by §60.562-1(a)(1)(i)(C). The net heating value of the process vent stream being combusted in a flare shall be computed as follows:

$$H_T = K_3 \left(\sum_{j=1}^{n} C_j J_j \right)$$

Where:

HT = Vent stream net heating value, MJ/scm (Btu/scf), where the net enthalpy per mole of off gas is based on combustion at 25°C and 760 mm HG (77°F and 30 in. Hg), but the standard temperature for determining the volume corresponding to one mole is 20°C (68°F).

K3 = 1.74×10^7 (1/ppm)(g-mole/scm)(MJ/kcal) (metric units) where standard temperature for (g-mole/scm) is 20°C

= 4.67×10^6 (1/ppm)(lb-mole/scf)(Btu/kcal) (English Units) where standard temperature for (lbmol/scf) is 68°F

Cj = Concentration on a wet basis of compound j in ppm.

Hj = Net heat of combustion of compound j, kcal/(g-mol) (kcal/lbmole), based on combustion at 25°C and 760 mm HG (77°F and 30 in. Hg).

(1) Method 18 shall be used to determine the concentration of each individual organic component (Cj) in the gas stream. Method 1 or 1A, as appropriate, shall be used to determine the sampling site to the inlet of the flare. Using this same sample, ASTM D1946-77 or 90 (Reapproved 1994) (incorporated by reference – see §60.17) shall be used to determine the hydrogen and carbon monoxide content.

(2) The sampling time for each run shall be 1 hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at 15 minute intervals.

(3) Published or calculated values shall be used for the net heats of combustion of the sample components. If values are not published or cannot be calculated, ASTM D2382-76 or 88 or D4809-95 (incorporated by reference – see §60.17) may be used to determine the net heat of combustion of component "j".

§60.564(g) The owner or operator shall determine compliance with the exit velocity provisions in § 60.18 as referenced by § 60.562-1(a)(1)(i)(C) as follows:

(1) If applicable, the net heating value (HT) of the process vent shall be determined according to the procedures in paragraph (f) of this section to determine the applicable velocity requirements.

(2) If applicable, the maximum permitted velocity (Vmax) for steam-assisted and nonassisted flares shall be computed using the following equation:

$$\mathbf{Log_{10}\,(Vmax) = (H_T + K_4)/K_5}$$

Where:

Vmax = Maximum permitted velocity, m/sec (ft/sec)

K4 = 28.8 (metric units), 1212 (English units)

K5 = 31.7 (metric units), 850.8 (English units)

HT = The net heating value as determined in paragraph (f) of this section, MJ/scm (Btu/scf).

(3) The maximum permitted velocity, Vmax, for air-assisted flares shall be determined by the following equation:

$$\mathbf{Vmax = K_6 + K_7 H_T}$$

Where:

Vmax = Maximum permitted velocity, m/sec (ft/sec).

K6 = 8.706 m/sec (metric units)
=28.56 ft/sec (English units)

K7 = 0.7084 [(m/sec)/MJ/scm)] (metric units)
= 0.00245 [(ft/sec)/Btu/scf)] (English units)

HT = The net heating value as determined in paragraph (f) of this section, MJ/scm (Btu/scf).

(4) The actual exit velocity of a flare shall be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by Method 2, 2A, 2C, or 2D as appropriate, by the unobstructed (free) cross sectional area of the flare tip.

[**45CSR16, 40CFR§60.564, Emission Point ID(s) (91E, B542E)**]

6.4 Recordkeeping and Reporting Requirements

6.4.1. Sunoco shall comply with the following sections from 40CFR§60.565(a):

(a) Each owner or operator subject to the provisions of 40CFR60 Subpart DDD shall keep an up-to-date, readily-accessible record of the following information measured during each performance test, and shall include the following information in the report of the initial performance test in addition to the written results of such performance tests as required under § 60.8.

(3) When a flare is used to demonstrate compliance with § 60.562-1, except § 60.562-1(a)(2):

(i) All visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the performance test,

(ii) Continuous records of the pilot flame heat-sensing monitoring, and

(iii) Records of all periods of operations during which the pilot flame is absent.

(5) When a flare is used to demonstrate compliance with § 60.562-1(a)(2):

(i) All visible emission readings made during the performance test,

(ii) Continuous records of the pilot flame heat-sensing monitoring, and

(iii) Records of all periods of operation during which the pilot flame is absent.

[**45CSR16, 40CFR§60.565(a), Emission Point ID(s) (91E, B542E)**

6.4.2. The permittee shall comply with the following sections from 40CFR§60.565(e):

(e) Where a flare is used to comply with § 60.562-1, except § 60.562-1(a)(1)(i)(D), each owner or operator subject to the provisions of this subpart shall keep for at least 2 years up-to-date, readily accessible continuous records of:

(1) The flare or pilot light flame heat sensing monitoring specified under § 60.563(b)(2), and

(2) All periods of operation in which the flare or pilot flame, as appropriate, is absent.

[**45CSR16, 40CFR§60.565(e), Emission Point ID(s) (91E, B542E)**

6.4.3. The permittee shall comply with the following sections from 40CFR§60.565(g) and (i):

(g) Each owner or operator of an affected facility subject to the provisions of this subpart and seeking to demonstrate compliance with § 60.560(j) or § 60.562-1 shall keep up-to-date, readily accessible records of:

(1) Any changes in production capacity, feedstock type, or catalyst type, or of any replacement, removal or addition of product recovery equipment; and

(2) The results of any performance test performed pursuant to the procedures specified by § 60.564.

(i) Each owner and operator subject to the provisions of this subpart is exempt from § 60.7(c) of the General Provisions.

[**45CSR16, 40CFR§60.565(g) and (i), Emission Point ID(s) (91E, B542E)**

6.4.4. The permittee shall comply with the following sections from 40CFR§60.565(k):

a. 40CFR§60.565(k)

Each owner or operator that seeks to comply with the requirements of this subpart by complying with the uncontrolled threshold emission rate cutoff provision of §60.560 (d) and (e), the individual stream exemptions of §60.560(g), or the requirements of § 60.562-1 shall submit to the Administrator semiannual reports of the following recorded information, as applicable. The initial report shall be submitted within 6 months after the initial start-up date.

b. 40CFR§60.565(k)(4) All periods recorded under § 60.565(e) in which the flare or pilot flame was absent.

[**45CSR16, 40CFR§60.565(k), Emission Point ID(s) (91E, B542E)**

6.4.5. The permittee shall comply with the following sections from 40CFR§60.565(l) and (m):

(l) Each owner or operator subject to the provisions of this subpart shall notify the Administrator of the specific provisions of § 60.562, § 60.560(d), or § 60.560(e), as applicable, with which the owner or operator has elected to comply. Notification shall be submitted with the notification of initial startup required by § 60.7(a)(3). If an owner or operator elects at a later date to use an alternative provision of § 60.562 with which he or she will comply or becomes subject to § 60.562 for the first time (i.e., the owner or operator can no longer meet the requirements of this subpart by complying with the uncontrolled threshold emission rate cutoff provision in § 60.560 (d) or (e)), then the owner or operator shall notify the Administrator 90 days before implementing a change and, upon implementing a change, a performance test shall be performed as specified in § 60.564.

(m) The requirements of this subsection remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves alternative reporting requirements or means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with this subsection, provided that they comply with the requirements established by the State.

[**45CSR16, 40CFR§60.565(l) and (m), Emission Point ID(s) (91E, B542E)**

6.4.6. The permittee shall report any emergency emissions to the ISBL (91E) or the OSBL (B542E) flare systems to the West Virginia Division of Air Quality. The facility must provide the following information in the report: date of the occurrence, amount and type of materials vented to the flare, time that emissions to the flare started, time that emissions to the flare ended, and the reason for emergency emissions to the flare.
[45CSR13, Permit No. R13-1830~~E~~, Condition 4.5.1., Emission Point ID(s) (91E, B542E)]

6.4.7. The permitted facility shall comply with the certification and reporting requirements of Sections 5.1 and 5.2 of 45CSR21. Section 5.2 of this Rule is stated as follows:

Reports of excess emissions. -- Except as provided in section 45CSR§21- 9.3., the owner or operator of any facility containing sources subject to this section 5. shall, for each occurrence of excess emissions expected to last more than 7 days, within 1 business day of becoming aware of such occurrence, supply the Director by letter with the following information:

a. The name and location of the facility;

b. The subject sources that caused the excess emissions;

c. The time and date of first observation of the excess emissions; and

d. The cause and expected duration of the excess emissions.

e. For sources subject to numerical emission limitations, the estimated rate of emissions (expressed in the units of the applicable emission limitation) and the operating data and calculations used in determining the magnitude of the excess emissions; and

f. The proposed corrective actions and schedule to correct the conditions causing the excess emissions.

[45CSR13, Permit No. R13-1830~~E~~, Condition 4.5.2]

Attachment A

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature[1]
(please use blue ink) Responsible Official or Authorized Representative Date

Name & Title
(please print or type) Name Title

Telephone No. Fax No.

---

[1] This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or

(ii) the delegation of authority to such representative is approved in advance by the Director;

b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or

d. The designated representative delegated with such authority and approved in advance by the Director.

Attachment B

45CSR2 / 45CSR10 Monitoring Plan

Dated Submitted: April 7, 2008

Date Approved: April 7, 2008

Effective Date: April 14, 2008

west virginia department of environmental protection

Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475
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Joe Manchin III, Governor
Stephanie R. Timmermeyer, Cabinet Secretary
www.wvdep.org

April 7, 2008

Sunoco Chemicals
c/o Tim Thompson, HESS Manager
200 Big Sandy Road
Kenova, WV 25530

Dear Mr. Thompson:

Subject: Notice of Monitoring Plan Approval

The Division of Air Quality is pleased to inform you that the monitoring plan revision dated April 7, 2008 submitted pursuant to Regulations 2 & 10 for Sunoco Chemicals, Neal Plant, has been approved. The effective date of the plans are April 14, 2008.

Should you have questions or require additional information, contact Ms. Rebecca H. Johnson of my staff at (304) 926-0499 ext. 1206.

APPROVED: _____ DATE: April 7, 2008

John A. Benedict, Director

45 CSR 2 and 45 CSR 10
Monitoring and Recordkeeping Plans

Non-COMS/CEMS
Dated: 9/5/07

Facility Information

Facility Name:	Sunoco Chemical Company – Neal Plant
Facility Address:	200 Big Sandy Road Kenova, WV 25530
Facility Contact:	Jason E. Patrick – Environmental Superintendent Phone: 304-453-1371 Email: JPATRICK@sunocoinc.com

I. 45 CSR 2 Monitoring Plan

In accordance with 45 CSR 2, §8.2.a, following is the plan for monitoring compliance with the opacity limits set forth under 45 CSR 2 §3.

A. Facility Description

Boiler #2 – Combustion Engineering Inc. Overfeed Stocker Boiler with a Design Heat Input (DHI) of 155 mmBtu/hr. This boiler was installed August 1, 1960. A multicyclone was added in 1970 and a baghouse in 1998 to control particulate emissions. This boiler supplies low pressure steam (~275 psig) to the plant for process heating and heating of buildings during winter months.

B. Boiler #2 Stack (02E)

1. Applicable Standard – 45 CSR 2, §3.1

   Ten (10) percent opacity based on a six-minute block average

2. Monitoring Method

   - 40 CFR Part 60, Appendix A, Method 9 (Method 9) readings a minimum of once per month per stack during the months when the source operated at normal conditions for at least 24 consecutive hours and weather/lighting conditions were conductive to taking proper Method 9 readings, - 45 CSR 2A, §6.3.a.1.

   - Operating parameters to be monitored – 45 CSR 2A, §6.3.a.2,
     i. Steam Production
     ii. Baghouse Pressure Drop

- The monitoring method and frequency of each operating parameter to be monitored – 45 CSR 2A, §6.3.a.3,
  - i. Steam Production – direct reading once per shift.
  - ii. Baghouse Pressure Drop – every 6 hours by direct or computer reading

- The nominal range for each operating parameter to be monitored – 45 CSR 2A, §6.3.a.4,
  - i. Steam Production – maximum of 120,000 pounds/hr.
  - ii. Baghouse Pressure Drop – between 1.0 inches of water and 6 inches of water column.

- An explanation of how the operating parameters to be monitored were chosen, and how they are indicative of compliance – 45 CSR 2A, §6.3.a.5,
  - i. Steam Production – Operational parameters to be monitored for steam production were chosen based on maximum design heat input and associated steam production. Steam production parameters are indicators of heat input and fuel consumption.
  - ii. Baghouse Pressure Drop – Operational parameters to be monitored for baghouse pressure drop were chosen based on design parameters as indicated by the manufacturer. Baghouse pressure drop parameters are indicative of compliance because pressure drop indicates effective operation of the particulate filters, correlates to particulate removal, and particulate removal is an indicator of opacity compliance.

- An explanation of how the nominal ranges were established – 45 CSR 2A, §6.3.a.6,

  The nominal ranges for steam production and baghouse pressure drop were established based on unit design parameters and historical knowledge of operational conditions with regards to applicable limits.

- A response plan to be implemented during excursions of operating parameters will include, but not be limited to: (A) for excursions of any operating parameter exceeding one hour, a Method 9 reading will be performed for a minimum of six minutes for each hour during the excursion; (B) the Method 9 readings will continue each hour until four successive six minute observations demonstrate compliance – 45 CSR 2A, §§6.3.a.8, a.8.A

  The Director may require the monitoring plan to be revised when the Director has reason to believe that the nominal ranges established for operating parameters in the monitoring plan are no longer indicative of compliance or when the Director has reason to believe the excursions are excessive – 45 CSR 2A, §§6.3.a.7, a.7.A, and 6.4.

II. 45 CSR 10 Monitoring Plan

In accordance with 45 CSR 10, §8.2.c, the following is the plan for monitoring compliance with the sulfur dioxide weight emission standards expressed in 45 CSR 10 §3:

A. Facility Description

Boiler #2 – Combustion Engineering Inc. Overfeed Stocker Boiler with a Design Heat Input (DHI) of 155 mmBtu/hr. This boiler was installed August 1, 1960. A multicyclone was added in 1970 and a baghouse in 1998 to control particulate emissions. This boiler supplies low pressure steam (~275 psig) to the plant for process heating and heating of buildings during winter months.

B. Boiler #2 Stack (02E)

1. Applicable Standard - 45 CSR 10, §3.3

   Maximum Allowable Emission Rates for Similar Units in All Priority III Regions Except Region IV. – No person will cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount determined as follows:

   For Type 'b' and Type 'c' fuel burning units, the product of 3.2 and the total design heat input for such units discharging through those stacks in million BTU's per hour. – 45 CSR 10, §3.3.f

2. Monitoring Method

   - Parameters to be monitored – 45 CSR 10A, §6.4.a;
     Sulfur Content of Coal
     Heating Value of Coal

   - The monitoring method and frequency for each parameter to be monitored – 45 CSR 10A, §6.4.b;
     A measurement using ASTM methods for fuel quality analysis for Sulfur Content and Heating Value by an independent laboratory conducted once per shipment of coal.

   - Compliance range for each parameter to be monitored – 45 CSR 10A, §6.4.c;
     Sulfur content range not to exceed 1.2% and corresponding coal heating value

   - An explanation of how the parameters to be monitored were chosen, and how they are indicative of compliance – 45 CSR 10A, §6.4.d;
     Sulfur Dioxide emission rates are calculated on an equivalent fuel sulfur content basis utilizing the fuel sampling and analysis results. The equivalent fuel sulfur content basis assumes all sulfur contained in the fuel will be converted to sulfur dioxide.

- An explanation of how the compliance ranges were established – 45 CSR 10A, §6.4.e;

  Compliance ranges were established from AP-42 estimations (see attached calculations).

- Response plan to be implemented during excursions – 45 CSR 10A, §6.4.f;

  Coal with a sulfur content to heating value ratio exceeding the compliance maximum will not be accepted for use as fuel by Sunoco.

- A proposed compliance testing schedule for manufacturing process source(s) and combustion source(s) – 45 CSR 10A, §6.4.g;

  Sulfur Dioxide emission rates will be calculated on an equivalent fuel sulfur content basis utilizing a fuel sampling and analysis results. The facility maintains records of the operating schedule and the quality and quantity of fuel consumed in Boiler #2. The records maintained include the date and time of start-up and shutdown, the quantity of fuel consumed on an average daily basis, and a periodic fuel quality analysis using ASTM methods. Such periodic fuel quality analysis is established on the following schedule: Once per shipment of fuel. – 45 CSR 10, §8.2.

III. 45 CSR 2 Recordkeeping and Reporting Plan

A. Operating Schedule and Quality/Quantity of Fuel Burned

The owner or operator of a fuel burning unit(s) will maintain records of the operating schedule, and the quality of fuel burned in each fuel burning unit as set forth below – 45 CSR 2A, §7.1.a.

Coal only: records will include the date and time of start-up and shutdown, the quantity of fuel consumed on an average daily basis and an ash and BTU analysis for each shipment – 45 CSR 2A, §7.1.a.4.

B. Records Maintenance

Records for all required monitoring data and support information will be maintained on-site for a period of at least five years from the date of monitoring. Support information includes all calibration and maintenance records and copies of all required reports – 45 CSR 2A, §7.1.b.

C. Exception Reporting

Compliance with the reporting and testing requirements under the Appendix to 45 CSR 2 will fulfill the requirements for a periodic exception report under subdivision 8.3.b of 45 CSR 2 – 45 CSR 2A, §7.2.a.

Non-COMS Based Monitoring "Monitoring Summary Report" and/or "Excursion and Monitoring Plan" – Each owner or operator employing non-COMS based monitoring will submit a "Monitoring Summary Report"

and/or "Excursion and Monitoring Plan Performance Report" to the Director on a quarterly basis; the Director may, on a case-by-case basis, require more frequent reporting if the Director deems it necessary to accurately assess the compliance status of the fuel burning unit(s). All reports will be postmarked by the 30th day following the end of each calendar quarter. The Monitoring Summary Report will be in a format approved by the Director – 45 CSR 2A, §7.2.c.

a) If the total number of excursions for the reporting period is less than one percent of the total number of readings for the reported period and the number of readings missing for the reporting period is less than five percent of the total number of readings agreed upon in the monitoring plan for the reporting period, the Monitoring Summary Report will be submitted to the Director; the Excursion and Monitoring System Performance report will be maintained on-site and will be submitted to the Director upon request – 45 CSR 2A, §7.2.c.1.

b) If the total number of excursions for the reporting period is one percent or greater of the total number of readings for the reported period or the number of readings missing for the reporting period is five percent or greater of the total number of readings agreed upon in the monitoring plan for the reporting period, the Monitoring Summary Report and the Excursion and Monitoring System Performance Report will be submitted to the Director – 45 CSR 2A, §7.2.c.2.

c) The Excursion and Monitoring Plan Performance Report will be in a format approved by the Director and will include the following information – 45 CSR 2A, §7.2.c.3:

    i. The magnitude of each excursion, and the date and time, including starting and ending times, of each excursion – 45 CSR 2A, §7.2.c.3.A.

    ii. Specific identification of each excursion that occurs during start-up, shutdowns, and malfunctions of the facility – 45 CSR 2A, §7.2.c.3.B.

    iii. The nature and cause of any excursion (if known), and the corrective action taken and preventive measures adopted (if any) – 45 CSR 2A, §7.2.c.3.C.

    iv. The date and time identifying each period during when data is unavailable, and the reason for data unavailability and the corrective action taken – 45 CSR 2A, §7.2.c.3.D.

    v. When no excursions have occurred or there were not periods of data unavailability, such information will be stated in the report – 45 CSR 2A, §7.2.c.3.E.

d) To the extent that an excursion is due to a malfunction, the reporting requirements in section 9 of 45 CSR 2 will be followed – 45 CSR 2A, §7.2.d.

IV. 45 CSR 10 Recordkeeping and Reporting Plan

C. Operating Schedule and Quality/Quantity of Fuel Burned

Fuel burning units – The owner or operator of a fuel burning unit(s) will maintain records of the operating schedule and the quality and quantity of fuel burned in each unit as set forth below – 45 CSR 10A, §7.1.a:

The owner or operator will provide in the monitoring plan a quality control and quality assurance program for the fuel analysis. If a certified independent lab is used to provide the fuel analysis, the quality control and assurance program is deemed to be satisfactory – 45 CSR 10A, §7.1.a.1.

Records will include the date and time of start-up and shutdown, the quantity of fuel consumed on an average daily basis, and the fuel quality analysis of once per shipment. Fuel quality analysis will be conducted by a certified independent laboratory.

D. Record Maintenance

Records of all required monitoring data and support information will be maintained on-site for a period of at least five years form the date of monitoring. Support information includes all calibration and maintenance records of all required reports – 45 CSR 10A, §7.1.d.

E. Exception Reporting

Non-CEMS Based Monitoring – Each owner or operator employing monitoring pursuant to subsection 6.4 will submit a "Monitoring Summary Report" and an "Excursion and Monitoring Plan Performance Report" to the Director on a quarterly basis; the Director may, on a case-by-case basis, require more frequent reporting if the Director deems it necessary to accurately assess the compliance status of the fuel burning unit(s). All reports will be postmarked by the 30th day following the end of each calendar quarter. The Monitoring Summary Report will contain the information and be in a format approved by the Director – 45 CSR 10A, §7.2.b.

a) If the total number of excursions for the reporting period is less than four percent of the total number of readings for the reported period and the number of readings missing for the reporting period is less than five percent of the total number of readings agreed upon in the monitoring plan for the reporting period, the Monitoring Summary Report will be submitted to the Director; the Excursion and Monitoring System Performance report will be maintained on-site and will be submitted to the Director upon request – 45 CSR 10A, §7.2.b.1.

b) If the total number of excursions for the reporting period is four percent or greater of the total number of readings for the reported period or the number of readings missing for the reporting period is five percent or greater of the total number of readings agreed upon in the monitoring plan for the reporting period, the Monitoring Summary Report and the Excursion and Monitoring System Performance Report will be submitted to the Director – 45 CSR 10A, §7.2.b.2.

c) The Excursion and Monitoring Plan Performance Report will be in a format specified in an approved monitoring plan and will include the following information – 45 CSR 10A, §7.2.b.3:

i) The magnitude of each excursion, and the date and time, including starting and ending times, of each excursion – 45 CSR 10A, §7.2.b.3.A.

ii) Specific identification of each excursion that occurs during start-up, shutdowns, and malfunctions of the facility – 45 CSR 10A, §7.2.b.3.B.

iii) The nature and cause of any excursion (if known), and the corrective action taken and preventive measures adopted (if any) – 45 CSR 10A, §7.2.b.3.C.

iv) The date and time identifying each period during when data is unavailable, and the reason for data unavailability and the corrective action taken – 45 CSR 10A, §7.2.b.3.D.

v) When no excursions have occurred or there were not periods of data unavailability, such information will be stated in the report – 45 CSR 10A, §7.2.b.3.E.

ATTACHMENT A – SO_2 EMISSION CALCULATIONS

Attachment A documents the emission calculation basis used to establish a fuel sulfur content maximum of 1.2% established as the compliance parameter range in Section II.B.2 of this Monitoring Plan.

Regulatory Based Allowable Emissions

Per 45 CSR 10, §3.3, the maximum allowable emission rate in all Priority III Regions for type 'b' and type 'c' fuel burning units is the product of 3.2 and the total design heat input of the fuel burning unit in MMBtu/hr. Boiler #2 has a maximum heat input of 155 MMBtu/hr, therefore, an allowable SO2 emission rate of 496 lb/hr.

Per 45 CSR 10A, §7.1a, if the fuel quality is less than 90% of the maximum allowable emission rate per 45 CSR 10, §3.3 then the analysis of the fuel supply can occur once per shipment. Therefore, a threshold of 446.6 lb/hr is established for the Neal Plant in order to analyze fuel once per shipment.

Permit Based Allowable Emissions

In accordance with Permit R13-1830C, Sunoco has established an SO_2 emission limitation of 282 lb/hr (Permit Condition A.14). This hourly SO_2 emission rate for the coal-fired boiler is calculated using the method described in U.S. EPA AP-42, Section 1.1. In this section, Table 1.1-3 provides a method for calculating an SO_2 emission factor based on a unitless coefficient (38) and the sulfur weight percent of the coal (S). Using the calculated emission factor along with the maximum designed firing rate of the boiler and the heat content of the fuel source, an hourly SO_2 emission rate from the boiler is determined.

The following presents an example of potential inputs and the calculation method used to establish the SO_2 emission limitation of 282 lb/hr. It is clear from the equation presented below that the sulfur weight percent and heating value of the coal burned are variable parameters that impact the calculated emission rate, where the maximum firing rate and AP-42 coefficient are fixed parameters. It is for this reason that Sunoco tracks sulfur weight percent and heating value of the coal burned in the boiler as the method for demonstrating continued compliance with the emission limit.

EF (lb SO_2/ton coal burned) = 38*S
S = 1.20 wt. % sulfur in coal
Firing Rate = 155 MMBtu/hr
Fuel Heating Value = 12,532 Btu/lb coal

$$155\left(\frac{\text{MMBtu}}{\text{hr}}\right)*1{,}000{,}000\left(\frac{\text{Btu}}{\text{MMBtu}}\right)*\frac{1}{12{,}532}\left(\frac{\text{lb coal}}{\text{Btu}}\right)*\frac{1}{2{,}000}\left(\frac{\text{ton coal}}{\text{lb coal}}\right)*38*1.20\left(\frac{\text{lb SO}_2}{\text{ton coal}}\right)=282\left(\frac{\text{lb SO}_2}{\text{hr}}\right)$$

The permitted SO_2 emission limitation is well below the 90% threshold of allowable SO2 emissions based on the size of Sunoco's boiler. Therefore, Sunoco is able to take advantage of analyzing coal on a once per shipment basis as allowed by 45 CSR 10A, §7.1a.

Attachment B includes a copy of the contract Sunoco holds with their coal suppliers explicitly limiting the sulfur content of the coal to below 1.0%. This coal sulfur content limit provides Sunoco with an increased level of assurance in documenting compliance with the SO_2 emission limitation.

Sunoco operates six other fuel burning units at the Neal Plant. These units include five natural gas burning units (Back-up Gas Boiler, H-081, H-082, ISBL Flare Pilot, and OSBL Flare Pilot) and one propane-burning unit (Nitrogen Heater). According to the exemptions established in 45 CSR 10A, §3.1, these units are not subject to the monitoring plan requirements of 45 CSR 10.

ATTACHMENT B – COAL SUPPLIER CONTRACT